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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,402	05/03/2005	Walter Spiess	2002DE305	9206
	7590 10/02/200 NIC MATERIALS US	EXAMINER		
ATTENTION: INDUSTRIAL PROPERTY DEPT.			DAHIMENE, MAHMOUD	
70 MEISTER AVENUE SOMERVILLE, NJ 08876			ART UNIT	PAPER NUMBER
			1765	•
			MAIL DATE	DELIVERY MODE
			10/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<u> </u>	Application No.	Applicant(s)			
• •	10/511,402	SPIESS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Mahmoud Dahimene	1765			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v. Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 23 Ju	<u>ıly 2007</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
• •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-14 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) 1-3 and 7-13 is/are allowed.</li> <li>6)  Claim(s) 4 and 6 is/are rejected.</li> <li>7)  Claim(s) 5, 14 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/o</li> </ul>	wn from consideration.				
Application Papers		·			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the bedrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ate			

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 4 rejected under 35 U.S.C. 112, second paragraph, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of Ex parte Steigewald, 131 USPQ 74 (Bd. App. 1961); Ex parte Hall, 83 USPQ 38 (Bd. App. 1948); and Ex parte Hasche, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 4 recites the broad recitation "the nanocomposite composition contains from 1 to 50 percent by volume", and the claim also recites "preferably from 1 to 30 percent by volume, of nanoparticles" which is the narrower statement of the range/limitation.

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3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite, the use of multiple "and/or" makes the claim indefinite because it is not clear which resulting combination of components is claimed.

### Claim Objections

- 4. Claim 5 is objected to because of the following informalities: The expression "may be" makes it unclear if it is required for the radicals to be "aliphatic, aromatic and/or cycloaliphatic groups and Y is an inorganic or organic anion". For the purpose of the examination the expression "may be" is interpreted to mean "is not required".

  Appropriate correction is required. It is suggested that applicants amend the claims to better define the identity of the radicals.
- 5. Claim 14 is objected to because of the following informalities: The expression "preferably" makes it unclear if it is required for the plasma to contain "CHF3/O2" and "O2". For the purpose of the examination the expression "preferably" is interpreted to mean "is not required". Appropriate correction is required.

## Allowable Subject Matter

- 6. Claims 1-3, 7-13 are allowed.
- 7. The following is a statement of reasons for the indication of allowable subject matter:

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8. Regarding claim 1, the cited prior art of record fails to disclose or suggest a micolithographic arrangement comprising the particular layers and components in the manner described in the instant claim.

9. Regarding claim 9, the cited prior art of record fails to disclose or suggest a method for producing the allowable product of claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Dahimene whose telephone number is (571) 272-2410. The examiner can normally be reached on week days from 8:00 AM. to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NADINE G. NORTON SUPERVISORY PATENT EXAMINER

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